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ABSTRACT

A study examined the problems encountered when organizations adopt management strategies based on teamwork and total quality management (TQM) and the effectiveness of training in avoiding such problems. Survey instruments were mailed to 85 individuals involved in implementing work teams at 85 companies in 4 Missouri cities; 23 responses (27.1% response rate) were received. Of the respondents, 87% reported uncertainty and/or fear of the changes being implemented and more than 40% reported that employees (especially supervisors) were reluctant to accept teamwork- and TQM-based approaches. Nearly 40% of the respondents used at least five of the following types of training to facilitate organizational change: conflict resolution, communication skills, team decision making, problem identification, problem analysis, and use of TQM tools. It was recommended that organizations adopting teamwork- and TQM-based approaches take the following steps: (1) provide all employees with sound and timely information about upcoming changes/events; (2) ensure that managers/supervisors believe in the new approach before introducing it to lower-level employees; and (3) make information about upcoming changes accessible to all employees. Appended are the following: survey instrument and cover letter, sample data analysis, possible data correlations, and lists of potential problems/benefits of teamwork-based approaches.) Contains 27 references. (MN)

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A COMPARATIVE FIELD STUDY TO EVALUATE PRACTICAL APPROACHES IN IMPLEMENTING WORK TEAM GROUPS IN AN ORGANIZATIONAL SYSTEM

A Special Problem Submitted to the Department of Technical Education in Partial Fulfillment of the Requirements for the Degree of Masters of Science

by

Martin Splett

U.S. DEPARTMENT OF EDUCATION
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CHAPTER I

INTRODUCTION

Introductory Statement

Maintaining corporate competiveness and increasing functional efficiency are basic challenges that every company has to face. Theoretical concepts from the literature can be used to support organizations in their daily struggle. In this context a new approach such as the Total Quality Management concept gains more and more importance over time.

By using Total Quality Management many organizations are changing from a highly structured supervisor centered system to a work team system of employee involvement. During this transformation many of these organizations have encountered several problem areas. These appearing difficulties may cause higher financial costs and could retard the process of conversion to the new system. As a last consequence they may even lead to the ultimate failure of the conceptual introduction.

Statement of The Problem

This study was conducted to investigate practical problems related to the organizational structure and culture as well as interpersonal relations in the establishment of work teams within an organization.

Research Questions to be Addressed

The following research questions have been addressed in order to guide the acquisition of data required to satisfy the requirements of the statement of the problem:

1. What are the problems related to corporate culture that are encountered when work teams are set up in an organization?
2. What are the problems related to the organizational structure that are encountered in this process?
3. What are the problems among the members that must be resolved in order for a team to work together effectively?
4. Could these problems have been avoided, if the companies had paid closer attention to the basic principles of teamwork and Total Quality Management?

Definitions of Words and Terms

Corporate Culture: The norms, values and attitudes which exist in a company.

Organizational Structure: The formally defined framework of an organizations task and authority relationship as well as the framework to transport information.

Interpersonal Relations: The relations among the members of the corporation. These can be vertical among individual and groups as well as horizontal between the different levels of the hierarchy.

TQM: Total Quality Management

TI: Texas Instruments

IRS: Internal Revenue Service

Delimitations

This study was based on data gained from companies within the four states of Kansas, Arkansas, Oklahoma and Missouri. The information deals with internal factors of the organization. These are the corporate culture, the structure and the area of interpersonal relations. Current concepts from the literature recommended to set up a work team approach served as a model and provided standards. They showed if these problems could have been avoided.

Limitations

In any study, several factors may be beyond the researchers control. These set up limitations. The researcher was aware of the possible existence of the following limitations:

1. The respondents may refuse to cooperate and not respond.
2. The respondents may give distorted feedback by a lack of understanding of the terminology used in the survey instrument.
3. The respondents may give distorted feedback by misinterpreting the terminology in the survey instrument.
4. The respondents may have a fear to disclosure competitive advantages of the company. Therefore they may not answer truthfully.

5. The respondents may not have access to the necessary data needed for an adequate and helpful answer.

Significance of the Study

The significance of this study lies in the identification of cultural, structural and interpersonal problems that companies within the four state area encounter when implementing work teams in their organizations. It identified the weak points in the actual process of implementation and will serve as an advising guide. It can be beneficial for anyone in charge of planning and controlling such a process.

Assumptions

There are possible problems of the structure, the culture and the interpersonal relations that hinder the transformation of an organization. For the investigation of these, the following framework of assumptions was used:

1. Problems affecting work teams, which result from the actual corporate culture can be identified.
2. Problems affecting work teams which result from the existing organizational structure can be identified.
3. Problems which result out of interpersonal relation can be identified.
4. Theoretical experts, as well as practioners, predict problems for the implementation process of work teams, if certain rules concerning the corporate

culture, the structure of the system or the inter personal constellations are violated. These problems can be identified in the literature.

5. The findings, revealed by a survey instrument as well as by through a literature study, can be compared with each other.

Organization of the Study

This study is organized in chapters so that the reader can easily find the portion of interest:

Chapter I Introduces the reader to the study. The major parts of this chapter are the statement of the problem and the research questions to be addressed.

Chapter II Presents a review of the literature that was used in developing the statement of the problem and in the procedures to be used.

Chapter III Indicates the procedures to be used to conduct the study and how the data will be processed.

Chapter IV Gives the findings of the study in tables and narrative.

Chapter V Gives a summary and conclusions as well as recommendations based upon the findings.

CHAPTER II

REVIEW OF THE LITERATURE

Implementing TQM Related Work Teams in the Public Sector

The implementation of the TQM concept first took place in the private sector. However, the public sector started showing interest in this approach too.

The General accounting Office of the United States conducted an investigation of the realization of this concept in the Navy (United States, 1993) in the Army (United States, 1995) and in NASA (United States, 1995).
They revealed nine major barriers during the implication process, that were related to employee issues. The three most important listed areas are:

(1) that employees do not believe that they are empowered to make changes.

(2) the employees lack of information and training how to use TQM tools and last.

(3) the employees lack of information and training on TQM concepts and theory.

This leads already to three broad problem areas. They are:

(1) a lack of trust which might be related to the corporate culture.

(2) an insufficient flow of information that points on the broad field of communication, and

(3) the lack of sufficient preparing training.

Another investigation of this institution (United States, 1991) points out three common features that contribute to improved performance. They are:

(1) the role of management that leads the way in disseminating TQM values throughout the organization and has a crucial influence on the succeed or failure of the implementing process.

(2) the management that nurtures a flexible and responsive corporate culture, and

(3) the way or how fact based decision making is supported.

All together these outcomes of the investigations lead to areas which deserve further consideration.

Implementing TQM Related Work Teams in the Private Sector

The majority of the literature that deals with the TQM concept is focused on the private sector. The amount of published articles about TQM has increased with the growing popularity of the concept itself. Dyer (1977) developed a "pre-team-building check list" that covers 14 items to check needs and possible problems of work teams. He also listed eight items which attempt to determine if the manager is prepared to start a team building program. A lot of contributions come out of articles, that cover in a general and broad way the concept of TQM, the implementation process, and possible problems.

Chanudron (1992) lists several common pitfalls that occur when companies implement TQM. Mentioning the organiza-

tional structure as critical, he also emphasizes that a thorough diagnosis should be conducted before the implementation. Additionally he referred to the reward system and the performance appraisal systems in the company. The factor of compensation is also mentioned in the article Nine steps to better work teams (1993) besides the recommendation to work within a time frame for this process of change which is realistic and long enough. In addition to the already mentioned rewards and compensation system, the appraisal systems and the organizational structures, Steinburg (1993) describes the importance of the information system. Top management commitment, personal mind shifts, individual abilities and characteristics as well as team member conflicts are listed as possible reasons for difficult implementations. Complaints culled from interviews, books and articles build the background of which Gordon (1994) came up with 17 points that can cause pitfalls of teams. in his article he communicates the idea that leadership and accountability contribute to either success or failure.

Wellins (1992) contribution to this is composed of five issues that are considered worthwhile should a successful change occur. They are:

(1) the process of the team design.

(2) the selection of the team players.

(3) the training.

(4) initiating leadership, and finally

(5) reward team performance.

How well teams function in their daily work and how difficult their actual implementation gets, is already influenced by the team design and organization phases during the planning process. Montebello and Buzzola (1993) provide a live cycle model that describes different stages a team goes through during its development. The very first stage stresses potential dangers that might especially disturb a smooth implementation to the organizational environment.

Stoner and Hartman (1993) introduced facilitator as valuable helpers. They describe their broad goals and explain, in addition, the role of a team coach. Furthermore they point out that it is important not to press too hard or expect too much during a team's initial development activities. Owens (1991) article dealt basically with self managing work teams. It contributes prerequisites needed out of the structural and cultural area. He paid special attention to the selection of team members, the identification of skills and resources needed, the assigning of roles and responsibilities, defining work processes, the providing of training and finally the issue of team compensation. As described in Huszczo's (1990) article, it is not that easy to set up teams to work efficiently. Ten common pitfalls of team-training approaches are mentioned as well as seven suggested components of successful teams.

Anderson's, Hardy's and West's (1990) article came out of the associated area of innovative teams. Nevertheless, they provide four key determinants, which can influence any team.

These are:

(1) a shared vision.

(2) participants safety.

(3) a climate for excellence, and last

(4) sufficient support.

Other important points they mentioned arose out of a comparative study of two teams. Listed are their communication of information and their patterns and procedures about how decision are made.

Finally, Prior and Cullen (1993) presented organizational interventions as well as behavioral interventions that are related to such an organizational transformation. The first intervention mentioned include factors related to structural changes, the span of control, and changes in approval cycles. The latter intervention deals with changes in recognition systems and the behavior shown by top and middle management. Altogether these more broadly written articles provide a variety of ideas. These might become sources of problems and therefore demand special attention.

The following articles are more specific. They focused on only one or two critical factors. Chercasky (1992) gave a close look at the work climate and especially at the communication system inherent to the organization. Another important point of Musselwhite (1988) besides his mentioning of the right and sufficient training, is careful integration of compensation. A healthy balance between group and individual based compensation is as important as concerns about given situational factors.

An extremely sensitive issue that requires careful thought and attention is the involvement of the top and middle level managers. Smits (1987) identified their acceptance as absolutely critical. To secure the middle managers support he especially suggested several supporting actions, emphasizing the management function to serve as a role model for intended behavior.

That not every transformation process happens without conflicts is only natural (Vogt, Hunt, 1988). But, not only lacking training or insufficient human and time resources can be the reason. Even more basic conflicts can arise, if the nature of the task or the process is not ideally structured to be solved by a team approach. That leads to the fundamental question, was the implementation process situationally doomed to fail from the very beginning? The workforce is not the only one who finds this re-creation process demanding. It is even more challenging for every manager in charge, regardless of his or her hierarchical level.

Leadership in a team environment requires different styles of leadership as well as different skills (Zenger, Musselwhite, Hurson, Perrin, 1992). To be able to use appropriate and different styles is not only important for implementation, but also necessary for the maintenance and efficient utilization of teams. The values and the culture, as well as the vision and the strategic focus form the core issues and the ground upon which everything is based (Clemmer, 1993).

Again, the point of highest leverage in building a team-based organization is the teamwork and involvement shown by senior management. And, last but not least, McCormac (1992) stressed the need to follow a strategic framework for implementation. Neglecting such a guide leads to predictably poor results.

Related Studies

A well done documentation of the development process, but less of a planned study, was formulated by Cheney, Sims and Monz (1994). Starting as a "traditional" organization in 1972, Texas Instrument (TI) set up a plant in Kuala Lumpur, Malaysia.

They describe how the change from a traditional vertical structured plant to a corporation occurs, which is now highly team oriented. Two issues are mentioned as most important. First, the step by step development of the employees using the appropriate training. Secondly, it is emphasized, that good communication right from the start is decidingly beneficial. In conclusion, they offer a model that recommended paying attention to five broad areas. They are:

(1) formulation of a model.

(2) time of preparation.

(3) involvement.

(4) values, and finally

(5) patience.

A similar scenario is documented by Ferrero (1994). The observed organization was the Internal Revenue Service (IRS) that developed between 1987 and 1992 more than 400 cross-functional teams nationwide. Besides the blueprint of the implementation steps, this article provided a listing by Parker (1993) of the top 10 ways to guarantee team failure. What makes this conversion especially interesting is the use of initial impact teams. These are designed to support the organizations transition toward a desired culture.

The research findings of a total of 34 field studies conducted between 1977 and 1983 built the base to which Pearce and Ravlin (1987) formulated their model. Their literature research reveals seven basic key determinants that influences not only the level of the groups effectiveness, but also can be seen as fundamental for success or failure of a team in general. They are:

(1) group cohesiveness.

(2) communication and coordination.

(3) reward structure.

(4) composition of membership.

(5) intergroup and intragroup status.

(6) coaching , and finally

(7) activation processes.

Based upon these results a model was set up to implement successfully self-regulating work groups.

Their concept provides a framework that shows five main phases:

(1) preconditions needed to start team approaches (related to the task, the organization and the personnel).

(2) propositions about the design (as communication systems, group compositions and coordination mechanisms).

(3) propositions about the activation (as supportive actions by the management or considerations about training).

(4) process criteria, and

(5) evaluation criteria.

Especially the first three phases deserve a closer investigation because of their immense impact on a successfully implemented start up.

Summary

The number of articles recently published shows the increasing popularity and importance of all different kinds of team approaches.

However, the listing of possible pitfalls shows, that a sound and thoroughly planned and preparation phase is absolutely imperative for successful implementation. The following indicated broad areas will be of further importance to this study: the given time frame as well as the strategic framework, the alteration of the reward and appraisal system, and the utilization of external help for the organiza-

tion or for a group as provided by consultants and facilitator. Furthermore, the use of timeliness and proper training, the cultural values, and the management involvement, and finally the composition of the team. These listed areas must be seen in context of an overall approach, which includes three main hierarchical levels.

These are:

(1) the senior management.

(2) the "linking level" of supervisor, and

(3) the finally affected work-force.

Depending on the observed level, different areas gain importance. However, each hierarchical level is able to doom the whole transformation process. A poor strategic concept as well as neglected planning "in detail" by the senior management creates problems from the very beginning. A lack of training and involvement of the middle and lowers hierarchies also leads to the ultimate failure of the implementation. The same effect have missing adoptions of the daily work environment or the daily support by competent facilitator. Each comprises potential pitfalls and will be examined more deeply in the following research.

CHAPTER III

PROCEDURE

This was a descriptive study where a survey instrument was used to obtain the needed data. The responses of 23 persons involved in the implementing process of work teams were used to validate possible problems described in the literature as well as to identify other difficulties in the actually transition of the organization.

Population

The identification and selection of companies and especially their contact persons was done with the help of Dr. Robert Schwindt, Dr. Robert Nickolaisen, Mr. Bob Chesney and Mrs. Jane Davis. Especially Mrs. Davis contributed to the successful targeting of the right persons involved in the process of implementing teams.

Process Used To Obtain Data

To obtain the needed data, a survey instrument was mailed to people who have been involved in the team implementation or who have been in charge of the organizational transition. The instrument itself consisted of 25 questions and covered the areas mentioned in Chapter I and Chapter II.

Development of the Instrument

Items for the survey instrument were identified during the review of literature. They were developed related to the three areas of the organizational culture, the organization-

al structure, and interpersonal relations. In addition other items were identified that related to two or three of these categories. Three types of items were developed. A Likert scale was used for items to obtain respondents feelings or opinions about the different areas. Multiple choice items were included where respondents were asked to put the choices most representative of their organization. In addition, the respondent had the opportunity to outline benefits and disadvantages of the change occurred by using key words.

To improve the validity of the instrument and data obtained, related items were asked in both the Likert scale and multiple choice formats.

Validation of the Instrument

To make the responses on the survey instrument as easy as possible, the utilization of carefully formulated items were crucial for the rate of return and the quality of the responses. Therefore the instrument was submitted to the PSU faculty members, Dr. Robert Schwindt and Dr. Thomas Box as well as to Mr. Robert Nickolaison.

Their expertise and experience was used to improve and clarify the content as well as the formulation of the questions to guarantee the best results possible.

Survey Time Limits

The survey instrument along with a transmittal letter and pre-addressed, postpaid envelope was sent to each cooperating company. This was done between June, 21 and June, 25. The contact persons were asked to complete and send back

the instrument within a ten day period. The last returned response that was included in the study was received on July, 8.

Processing Data

Once the data were received, the findings were entered in tables and figures, and a narrative was developed to report the findings. Data was analyzed as it related to specific research questions and categories that are related. Data was also compared to see how consistent respondents replied. All findings were reported in Chapter IV.

CHAPTER IV

FINDINGS

This chapter presents data, which was gained with the survey instrument as introduced and described in chapter III and Appendix B. The findings are presented in tabular form and narrative. A total of 85 survey instruments were mailed by May 25, 1995. 23 instruments were returned by the date the data needed to be processed. This is the equivalent of a return rate of 27.1 %.

Explanations to the Respondents

Initially the survey instrument was designed to be send out to companies located in a 100 miles radius of Pittsburg, as described in chapter III. However the original target area needed to be changed. This modification was the result of the available addresses of organizations and their contact persons. Most companies with relative work teams were located in the areas of Joplin, Springfield, Carthage, and Neosho, Missouri.

The Revealed Data

Following are the tables that present the total numbers of respondents given as well as the percentages of responses for each item. This form of presentation was chosen to give an complete as possible overview. Instead of already narrowing down the results on some selected items all are listed. This allows the reader to check between different items and look for possible connections on his/ her own. Figures of

particular interest will be emphasized in narrative form.

Table I is composed of survey items to present an overall profile of the investigated organizations. Respondents were asked to evaluate statements that had to do with cultural and structural issues as well as with "the human factor" of their company.

TABLE I

FINDINGS OF ITEMS # 1 TO 9 IN NUMBER AND PERCENTAGES

	SA		A		U		D		SD	
	#	%	#	%	#	%	#	%	#	%
1. There was Uncertainty.	10	43.5	10	43.5	1	4.3	2	8.7	0	0.0
2. There was Fear.	3	13.0	7	30.4	6	26.1	7	30.4	0	0.0
3. Roles and Expectations Were Clear.	1	4.3	4	17.4	7	30.4	8	34.8	3	13.0
4. Supervisors complained about loosing control.	0	0.0	9	39.1	4	17.4	9	39.1	1	4.3
5. Top Management was "leading by Example.	6	26.1	9	39.1	3	13.0	2	8.7	3	13.0
6. The same Level of Employee Output was expected.	2	8.7	14	60.9	0	0.0	4	17.4	3	13.0
7. Employees were reluctant to be involved.	0	0.0	10	43.5	4	17.4	7	30.4	2	8.7
8. Employees were informed about coming events and implementation times.	0	0.0	14	60.9	3	13.0	4	17.4	3	13.0
9. The Communication Network provided was suitable for the new Situation.	2	8.7	9	39.1	5	21.7	7	30.4	0	0.0

TABLE I (CONTINUED)

FINDINGS OF ITEMS # 10 TO 16 IN NUMBERS AND PERCENTAGES

	SA		A		U		D		SD	
	#	%	#	%	#	%	#	%	#	%
10. The Time Frame Given to Implement the Teams were Adequate.	2	8.7	14	60.9	3	13.0	4	17.4	0	0.0
11. The Competencies needed for this change were available in the company.	4	17.4	13	56.5	2	8.7	4	17.4	0	0.0
12. The Team Members had the Skills and Abilities needed for their new task.	4	17.4	6	26.1	1	4.3	11	47.8	1	4.3
13. Employees were not afraid of Loosing Their Job.	6	26.1	9	39.1	4	17.4	3	13.0	1	4.3
14. The compensation system was appropriate for the new Circumstances.	3	13.0	5	21.7	9	39.1	3	13.0	3	13.0
15. A Written Mission/ Vision Statement Supported the Implemantation Process.	4	17.4	10	43.5	1	4.3	7	30.4	1	4.3
16. Lower Level Employees were Involved with Senior Management during the Planning Phase.	1	4.3	7	30.4	4	17.4	10	43.5	1	4.3

TABLE I (CONTINUED)

FINDINGS OF ITEMS # 17 TO 19 IN NUMBERS AND PERCENTAGES

	SA		A		U		D		SD	
	#	%	#	%	#	%	#	%	#	%
17. It was easy to get the Information needed.	3	13.0	5	21.7	7	30.4	7	30.4	1	4.3
18. The Work Force believed in the benefits of a Team Work approach.	1	4.3	7	30.4	13	56.5	2	8.7	0	0.0
19. Everybody received the Needed Training to be Prepared for the Change.	1	4.3	11	47.8	3	13.0	4	17.4	2	8.7

One important finding is the response given to items #1 and #2. In almost all organizations (87 %) there was uncertainty and even, in nearly a half, fear of what to expect from the changes. Interesting too was, that only about a fifth of the organizations stated that they had clear roles and expectations (item #3) for the upcoming time period!

The next item to look at is item #4. It deals with complains of supervisors about loosing control. Only about 39 % faced this kind of problem. However a cross check with table V shows supervisors as the leading category in the "resistance charts".

One of the most critical contributions to a successful implementation of a team approach was identified in the literature as "walking the talk" of the upper management. Slightly surprising was, that only about 65 % of all organizations evaluated their management in item #5 by doing this. Item # 7 showed no really strong tendency for a rating. But, over 40 % agreed that employees showed a reluctance to be involved.

To reveal who actually was seen as most reluctant, survey item #23 was designed. Its results are presented in table V.

Item #8 and item #17 showed a contradictory tendency. The majority of all participants agreed that they were informed about the upcoming events and that the information system provided (item #9) was suitable for the new situation. However, only 34.7 % agreed that it was easy to get the information they needed easily (item #17).

Also seen as critical in the literature was the providing of an appropriate time frame. A majority of over two third of all companies respondents saw their time frame as sufficient. Even when 73.9 % identified the competencies needed as available in the company (item #11) almost half of the respondents disagreed with the statement that the team members possessed the skills and abilities needed for their new tasks (item #12). Only a relative small percentage of 17.3 % felt that their employees were afraid of loosing their job during the restructuring process.

Using a form of compensation appropriate for the new situation was also one factor mentioned as necessary and critical for the success in the literature. Only 34.7 % of respondents felt their system used was appropriate for the new circumstances.

Finally, item #18 was designed to investigate if the work force believed in the benefits of such a work team approach. Although only two respondents stated that, the work force seemed not to believe in the benefits. About 56.5 % rated their work force as uncertain about the benefits of a team work approach.

Presented next are the tables that show the responses given to survey items #20 to #23.

The border between uncertainty and fear is sometimes hard to draw. To simplify this differentiation, item #20 was designed as a cross-check against survey items #1 and #2. Respondents were asked to indicate the climate in the organization during the time teams were implemented. Responses are given in the following table.

TABLE II

ASSESSMENT OF THE CLIMATE

Climate	Responses	
	#	%
Fear	0	0.0
Uncertainty	17	73.9
Trust	4	17.4
Excitement	4	17.4

The overall climate definitely is one of uncertainty rather than one of fear. But, still noticeable is that in almost 74% of all implementations, this process is connected with a more negative than with a positive attitude. This is confirmed by the fact that only 17.4 % of respondents assessed the climate during that transition as one of trust, and also only 17.4 % described it as one of excitement!

Respondents were asked about the types of training given during the time teams were implemented. Table III shows the different types of training offered to the employees.

TABLE III

TYPES OF TRAINING PROVIDED

Training	Responses	
	#	%
Conflict Resolution	7	30.4
Communication Skills	10	43.5
Team Decision Making	19	82.6
Problem Identification	17	73.9
Problem Analysis	16	69.6
Use Of TQM Tools	15	65.2

Almost 40 % of the respondents used at least five of the six listed kinds of training. Emphasized was training that dealt with team decision making (82.6 %) and problem identification (73.9 %) while conflict resolution was the least used with only 30.4 %.

Respondents were asked what groups of employees were provided an overview of coming events and changes during the time teams were being implemented.

TABLE IV

ORGANIZATIONAL LEVELS PROVIDED WITH INFORMATION

Employees	Responses	
	#	%
All Employees	11	47.8
Top Management	5	21.7
Top and Middle Management	14	60.9
Individuals Selected Per Team	7	30.4

Table IV shows the different levels of the organizations provided with information. Interesting here is the relative small percentage of organizations that provided information to only the upper management level, and the high percentage that provided information to top *and* middle management or even *all* employees.

Table V shows the different organizational levels as listed in survey item #23. Its content is a ranking of these groups based on how reluctant they seemed to be in supporting the implementation process during the transition.

TABLE V
RANKING OF DIFFERENT ORGANIZATIONAL LEVELS IN BEING RELUCTANT

	Average Ranking	RANKED AS 1		2		3		4		Not Ranked	
		#	%	#	%	#	%	#	%	#	%
Upper Management	**2.69**	5	21.7	0	0.0	2	8.7	6	26.1	9	39.1
Middle Management	**2.60**	2	8.7	5	21.7	5	21.7	3	13.0	6	26.1
Supervisors	**1.71**	9	39.1	4	17.4	4	17.4	0	0.0	5	21.7
Unions		2	8.7	1	4.3	2	8.7	0	0.0	16	69.6
Line Employees	**2.82**	2	8.7	5	21.7	4	17.4	6	26.1	4	17.4
Professional Level	**2.70**	2	8.7	3	13.0	1	4.3	4	17.4	10	43.5

In addition to the total number per rank and their equivalent percentage, an average ranking was figured. How it was calculated is shown in Appendix C. The number of responses given for the unions was not sufficient to build a meaningful average. Furthermore, a number of responses marked "not applicable" for the union category which would indicate that their employees were not represented by a union.

Over 20 % ranked the upper management as the most reluctant; nobody ranked them second, 8.7 % ranked them as third and 26.1 % as fourth. The column "not ranked" covered the situation when the particular group was not ranked among the top four most reluctant groups. Over all, this table reveals the supervisors as the most reluctant group followed by the professional level. Surprising high in particular was the percentage of the upper management and the middle management level listed among the top four resistent groups by respondent with their average ranking of 2.69 and 2.60.

Survey items # 24 and # 25 were designed to give the respondent the opportunity not only to list the biggest problems experienced, but also to describe the benefits gained. However, the listing by using key words did not allow the responses to be displayed in a table. Therefore appendix E provides samples of statements and quotes given. However, despite the variety and diversity of key words used were some problem areas and benefits mentioned with a certain consistency. The difficulties to ensure the participation and collaboration of all members of a team were also

described in a similar manner. Again, uncertainty about upcoming events and a lack of trust among employees were often reported.

As benefits were stated higher standards of quality and improved communication within and between departments. Furthermore an overall change of minds toward continuous improvement mentality was noted. Finally, the development of a "we-attitude" and the process of "taking ownership" was frequently observed.

Matching the Data and the Research Questions

At the beginning of this study four research questions were asked to guide the further investigations. These research questions built the "mental frame" first for the review of the literature, and later for the design of the survey instrument. Sometimes it was not always that easy to relate one survey item clearly to only one of the three categories; cultural, structural or interpersonal. Some survey items tended to fit in more than one of these or to a category that contains elements out of two of them. Others can only be seen in the broader context of these categories.

One of the biggest problems related to corporate culture is the uncertainty and fear experienced. Almost nine of ten organizations investigated reported this problem. Data in addition revealed a work force in which about only one third of the employees see any benefit in the new approach or is convinced of its advantages, and nearly one half is reluctant to be involved.

A problem related to the organizational structure was the communication network which for only one half of the respondent's organizations seemed to be adequately suitable for the new situation. This might apply to the actual physical network as well as to regulations that determine who is allowed access to what kind of information.

Both research questions #3 and #4 were related to the scope of this special problem paper. Responsible for that were several factors. First, the number of questions asked per survey instrument was - and this is in particular true for such a "research exhausted area" as Pittsburg - correlated with the rate of return. The more questions asked the lower the probability of receiving a filled out and usable response. So, the limited amount of questions ultimately also limited the researchable areas. To investigate closer if the problems revealed would have been avoidable would have needed a lot more cross checking and relating information. The second factor was the time available for to design, to development, to analyze and to evaluate such a study.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Individuals from 23 companies gave responses and input to this study. Not all results reveal astonishing or totally surprising insights. To compare, analyze and evaluate the responses given per item was beyond this study. Responsible for that was the previously mentioned time frame as well as the unexpected low rate of return which resulted in the relative small number of participants. However, this study can provide "food for thoughts". Possible impulses for further research could arise out of Figure 1 shown in Appendix D. The idea behind this figure is, that it is often easier to understand data and show relationships by using a graphical aid. The single statements of all items used in the survey instrument provided the elements that the figure is composed of. The arrows drawn represent possible correlations that might exist. That way they represent thinkable connections as well as can serve as help to the development of assumptions that needs further investigations.

Based on these possible correlations and relationships, further research should consider investigating:

1. how items #1 and #2 are influenced by item # 8 and #9. One reasonable conclusion is, that the more information about upcoming events provided and the better the channels of communication are, the less the amount of uncertainty and fear.

2. An indirect relationship from #8 to #3 and finally to the items #1 and #2. The clearer the work force knows what its new role will be and what will be expected, the less uncertainty there will be among the employees. As Table V shows, only 60.9 % felt they were actually informed about the upcoming events.
3. How easy it is to get information definitely has an impact on the overall climate also. Item #17 reveals that only about one third stated access was easy. This might indicate either a deeper cultural resistance to share information, or that this important detail is just neglected.
4. To provide a suitable system is a premise to item #17 and has from there an impact on items # 1 and #2. When only 30.4 % disagree with the statement of having a good communication network, it might be interesting to look at other road blocks that obviously hinder the access to needed or wanted information.
5. Another linkage might exist between items #3, #12, #19 and #21. When in over 75% of all organizations no clear understanding exists about the work force's new roles and expectations, it could be worthwhile to examine closer how the preparing education and training phase looks like and how it might be improved.

Over all, the biggest problem identified was the existing climate of uncertainty and fear experienced in nearly all organizations by employees through all levels. Apart from the fact that such a climate contributes to a negative work atmosphere, it definitely impacts also the bottom line. Such a climate can lead to a unnecessary extended period of transition and so cause high costs for the organization.

As recommendations, three things are finally seen as imperative:

1. Sound and timely information about upcoming changes and events must be given to the work force. There should be little place for rumors, speculations and distorted truths. That includes not only information of what the final goal is intended to look like, but also the approximate time frame. Beyond that, relative specific blueprints should be given to all levels detailing what their part will be within this transformation and how the training offered will prepare them for their new tasks. When clearly communicated to the employees, there should be no uncertainty about expectations or "fuzzy goals".
2. "Walking the talk" by the management is the basic prerequisite to establish credibility. It not only shows how convinced they are about that new approach, but also has an impact on how much the work force is going to believe in this new approach.

3) Finally, the access to information needed and wanted should be established and secured also for lower level employees. This not only supports and increases the factor of management's credibility, but also prevents uncertainty causing rumors about what will be expected and gives the employee an orientation.

Implementing teams in organizations is definitely not only very interesting and fascinating, but also a very demanding process to everybody involved. But, the rewards can be high. Therefore, research that helps to implement teams successfully can only be encouraged.

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APPENDIX A

Pittsburg State University

Technical Education Department

1701 S. Broadway • Pittsburg, KS 66762-7561 • 316/235-4632 • FAX: 316/235-4006

Research Student

June 25, 1995

NAME OF COMPANY
Mr./ Mrs. [Name of Contact Person]
City, State and Zip Code

Dear Mr./ Mrs. [Name of Contact Person] :

I am a graduate student participating in a Master´s Program (Human Resource Development) at Pittsburg State University. Research in an area of HRD related to our career interests is a part of the degree.

My research deals with the transition of a "traditional" organization to one that implements and uses teams . This is a very demanding process for the organization as well as for it´s "human side". And, nobody knows that better than you as somebody directly involved in it.

Therefore, I ask you for your experience and for about 4 to 6 minutes of your time to fill out the form and to send it back to me by July the 5th to give me enough time to process the data.

The research project is designed to reveal the most frequently problems and those that interfere most with a smooth transformation to teams.
The result should be beneficial to anyone in present and future charge of such an implementation process.

If you are interested in the results of this project, please fill out the address field at the end of the questionnaire. The information you provide will be treated with highest confidentiality.

I sincerely appreciate your time and willingness to participate.
Sincerely,

.....
(Martin Splett)

APPENDIX B

SURVEY INSTRUMENT TO REVEAL TEAM IMPLEMENTATION PROBLEMS

Directory : Please circle the response that best describes your opinion

1 = strongly agree SA
2 = agree A
3 = uncertain U
4 = disagree D
5 = strongly disagree SD

During the time teams were being implemented :

	SA	A	U	D	SD
1. There was uncertainty.	1	2	3	4	5
2. There was fear.	1	2	3	4	5
3. Roles and expectations were clear.	1	2	3	4	5
4. Supervisors complained about losing control.	1	2	3	4	5
5. Top management was "leading by example".	1	2	3	4	5
6. The same level of employee output was expected.	1	2	3	4	5
7. Employees were reluctant to be involved.	1	2	3	4	5
8. Employees were informed about coming events and implementation times.	1	2	3	4	5
9. The communication network provided was suitable for the new situation.	1	2	3	4	5
10. The time frame given to implement the teams was adequate.	1	2	3	4	5
11. The competencies needed for this change were available in the company.	1	2	3	4	5
12. The team members had the skills and abilities needed for their new tasks.	1	2	3	4	5
13. Employees were not afraid of losing their job.	1	2	3	4	5
14. The compensation system was appropriate for the new circumstances.	1	2	3	4	5
15. A written mission/ vision statement supported the implementation process.	1	2	3	4	5
16. Lower level employees were involved with senior management during the planning phase.	1	2	3	4	5
17. It was easy to get the information needed.	1	2	3	4	5
18. The work force believed in the benefits of a team work approach.	1	2	3	4	5
19. Everybody received the needed training in time to be prepared for the changes.	1	2	3	4	5

20. During the time teams were implemented in the organization, the overall climate was (please check one) :

- O fear
- O uncertainty
- O trust
- O excitement

21. During the time teams were implemented the following types of training was given (please check all that apply) :

- O conflict resolution
- O communication skills
- O team decision making
- O problem identification
- O problem analysis
- O use of TQM tools

22. During the time the teams were implemented an overview of the coming events and changes was provided to (please check all that apply) :

- O all employees
- O top management
- O top and middle management
- O individuals selected per team

23. Please rank from 1 to 4 in order with # 1 for the group that was most reluctant during the implementation of teams :

- ... upper management
- ... middle management
- ... supervisors
- ... unions
- ... line employees
- ... professional level (engineers, etc.)

BEST COPY AVAILABLE

Please identify using key words the three biggest problems during the implementation process of work teams

1.

2.

3.

Please identify using key words the three biggest benefits from implementing and working with teams

1.

2.

3.

Thank you for your time and your contribution. Your participation builds valuable input to this study. Should you be interested in receiving the results, please check the appropriate field and provide in your mailing adress.

O not interested in results
O interested in results

Name : .....
Company adress: .....
.....
.....

APPENDIX C

Shown here is how the average ranking was calculated which is stated in Table V. As example is used the group of upper management.

# of People		Ranking	
5	x	1	= 5
0	x	2	= 0
2	x	3	= 6
6	x	4	= 24
13			35

35 : 13 = 2.69

Average Ranking for the group of upper management : 2.69

APPENDIX D

1 = strongly agree SA
2 = agree A
3 = uncertain U
4 = disagree D
5 = strongly disagree SD

During the time teams were being implemented :

	SA	A	U	D	SD
1. There was uncertainty.	1	2	3	4	5
2. There was fear.	1	2	3	4	5
3. Roles and expectations were clear.	1	2	3	4	5
4. Supervisors complained about losing control.	1	2	3	4	5
5. Top management was "leading by example".	1	2	3	4	5
6. The same level of employee output was expected.	1	2	3	4	5
7. Employees were reluctant to be involved.	1	2	3	4	5
8. Employees were informed about comin: events and implementation times.	1	2	3	4	5
9. The communication network provided was suitable for the new situation.	1	2	3	4	5
10. The time frame given to implement the teams was adequate.	1	2	3	4	5
11. The competencies needed for this change were available in the company.	1	2	3	4	5
12. The team members had the skills and abilities needed for their new tasks.	1	2	3	4	5
13. Employees were not afraid of losing their job.	1	2	3	4	5
14. The compensation system was appropriate for the new circumstances.	1	2	3	4	5
15. A written mission/ vision statement supported the implementation process.	1	2	3	4	5
16. Lower level employees were involved with senior management during the planning phase.	1	2	3	4	5
17. It was easy to get the information needed.	1	2	3	4	5
18. The work force believed in the benefits of a team work approach.	1	2	3	4	5
19. Everybody received the needed training in time to be prepared for the changes.	1	2	3	4	5

20. During the time teams were implemented in the organization, the overall climate was (please check one) :

O fear
O uncertainty
O trust
O excitement

21. During the time teams were implemented the following types of training was given (please check all that apply) :

O conflict resolution
O communication skills
O team decision making
O problem identification
O problem analysis
O use of TQM tools

22. During the time the teams were implemented an overview of the coming events and changes was provided to (please check all that apply) :

O all employees
O top management
O top and middle management
O individuals selected per team

23. Please rank from 1 to 4 in order with # 1 for the group that was most reluctant during the implementation of teams :

... upper management
... middle management
... supervisors
... unions
... line employees
... professional level (engineers, etc.)

Figure 1.: Possible Correlations

APPENDIX E

SELECTED PROBLEMS EXPERIENCED

Not enough understanding of the tasks.

Not enough training / training not thorough enough.

For most people the time between training and application was too long.

Employee´s fear of supervisor reprisal.

Upper management had trouble "walking the talk".

Top management became upset with a team´s solution to a problem.

Lack of guidance from steering team.

Involvement of supervisors was omitted. That caused problems because workers did not receive support outside meetings.

Why teams?

As long term project: Where is the return of investment in "doing teams"?

Pressure from routine work besides all changes.

Time: it took ten years to get at the current level!

SELECTED BENEFITS EXPERIENCED

Improved teamwork.

Improved morale.

Better employee climate/ more open communication among employees.

Cost control.

Taking ownership / a sence of purpose aside from producing.

Problem solving moved from symptom correction to cause correction.

Better decision making and improved ideas.

Cross functional awareness.

Reduction of barriers within and between departments.

Management gained respect for line members ability to solve problems.